# PATENT COOPERATION TREATY



## **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

	PATENT COOPERATION TREA	ATY —
anslation interna	PCT ATIONAL PRELIMINARY EXAMINA	TION REPORT
INTERINA	(PCT Article 36 and Rule 70)	
		ation of Transmittal of Intern
Applicant's or agent's file reference 24550PCT drr/ba	FOR FURTHER ACTION Preliminary E	Examination Report (Form PCT/IPE
International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/EP2003/006942	30 June 2003 (30.06.2003)	22 July 2002 (22.07.200
International Patent Classification (IPC A61M 15/00	) or national classification and IPC	
Applicant		
**	VON SCHUCKMANN, Alfred	
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<ol> <li>This international preliminary and is transmitted to the applic</li> </ol>	examination report has been prepared by this Interneant according to Article 36.	ational Preliminary Examiling Aud
2. This REPORT consists of a to	tal of sheets, including this cover s	heet.
	mpanied by ANNEXES, i.e., sheets of the description	
amended and are the ba	asis for this report and/or sheets containing rectifica	tions made before this Authority (
	of the Administrative Instructions under the PCT).	
These annexes consist	of a total of sheets.	
3. This report contains indication	ns relating to the following items:	
I Basis of the re	eport	
II Priority		
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<u> </u>	nment of opinion with regard to novelty, inventive st	ep and industrial applicability
Non-establish		ep and industrial applicability
III Non-establish  IV Lack of unity	of invention	
III Non-establish  IV Lack of unity  V Reasoned star citations and	of invention tement under Article 35(2) with regard to novelty, in explanations supporting such statement	
III Non-establish  IV Lack of unity  V Reasoned starcitations and  VI Certain docum	of invention tement under Article 35(2) with regard to novelty, in explanations supporting such statement ments cited	
III Non-establish  IV Lack of unity  V Reasoned star citations and  VI Certain docum  VII Certain defect	of invention  tement under Article 35(2) with regard to novelty, in explanations supporting such statement ments cited application	
III Non-establish  IV Lack of unity  V Reasoned star citations and  VI Certain documents of the control of the	of invention tement under Article 35(2) with regard to novelty, in explanations supporting such statement ments cited	
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III Non-establish  IV Lack of unity  V Reasoned star citations and  VI Certain docum  VII Certain defections  VIII Certain observations	of invention  tement under Article 35(2) with regard to novelty, in explanations supporting such statement  ments cited  ets in the international application  rvations on the international application  Date of completion	nventive step or industrial applicabi



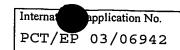
## International application No.

## PCT/EP2003/006942

I,	Basis	of the re	port	
1.	With	regard to	the elements of the international application:*	_
		the inte	mational application as originally filed	
	$\boxtimes$	the desc	cription:	
		pages	1-28 , as originally filed	l
		pages	, filed with the demand	
		pages	, filed with the letter of	_
	$\boxtimes$	the clair	ms:	
		pages		i
		pages	, as amended (together with any statement under Article 19	
		pages	, filed with the demand	
		pages	, filed with the letter of	
l	$\boxtimes$	the drav	vings:	
		pages		i
l		pages	, filed with the demand	l
		pages	, filed with the letter of	
	Πt	he seque	nce listing part of the description:	-
		pages	, as originally filed	4
		pages	, as originally fried	
İ		pages	, filed with the letter of, filed with the letter of	
2.	tne ir	the lang	the language, all the elements marked above were available or furnished to this Authority in the language in which all application was filed, unless otherwise indicated under this item.  It were available or furnished to this Authority in the following language which is:  It was a supplication furnished for the purposes of international search (under Rule 23.1(b)).  It was a supplication of the international application (under Rule 48.3(b)).  It was a supplication furnished for the purposes of international preliminary examination (under Rule 55.2 and/one).	•
3.	With prelia	regard	to any nucleotide and/or amino acid sequence disclosed in the international application, the international amino acid sequence listing:	l
		contain	ed in the international application in written form.	
		filed to	gether with the international application in computer readable form.	
		furnishe	ed subsequently to this Authority in written form.	
	Щ	furnishe	ed subsequently to this Authority in computer readable form.	
		The sta	stement that the subsequently furnished written sequence listing does not go beyond the disclosure in the ional application as filed has been furnished.	;
	Ш	The sta	tement that the information recorded in computer readable form is identical to the written sequence listing has rnished.	:
4.		The am	endments have resulted in the cancellation of:	
			he description, pages	
			he claims, Nos	
			he drawings, sheets/fig	
5.		This rep	ort has been established as if (some of) the amendments had not been made, since they have been considered to go he disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	
i	in thi	cement si is report 0.17).	heets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16	:
**,	Any r	eplaceme	nt sheet containing such amendments must be referred to under item 1 and annexed to this report.	

Internation Application No.
PCT/EP2003/006942

IV. Lack of unity of invention
1. In response to the invitation to restrict or pay additional fees the applicant has:
restricted the claims.
paid additional fees.
paid additional fees under protest.
neither restricted nor paid additional fees.
2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
complied with.
not complied with for the following reasons:
See supplemental sheet.
4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
all parts.
the parts relating to claims Nos



Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: BOX IV.3

### Lack of unity of invention

1. The examiner has determined that this international application contains multiple (groups of) inventions that are not linked by a single general inventive concept (PCT Rule 13.1), as follows:

#### I. Claims 1-21

manually actuated inhalator for powdered substances, the air flow volume resulting from the movement of the piston amounting to more than hundred times but less than six hundred times the volume of the metering chamber.

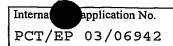
#### II. Claims 22-29

manually actuated inhalator for powdered substances in which the metering chamber is open towards the substance reservoir in the initial position of the shaft.

The reasons therefor are as follows.

The common features of the preamble of claims 1 and 22 are known from document D1 (see figure 3 and the abstract, member of the patent family of DE19963946, cited on page 2, line 5, of the application).

Claim 1 further defines the design of the metering chamber in order to improve the membrane service life (see page 2, lines 18-19).



Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: BOX IV.3

In claim 22, the metering chamber is designed in order to improve metering and the administration of powder doses (see page 7, lines 5-15).

Consequently, claims 1 and 22 solve different problems and do not have any common special technical features within the meaning of PCT Rule 13.2.

Intern	application No.
PCT/EP	03/06942

7.	Reasoned statement under Article 3 citations and explanations supporting	5(2) with regard to novelty ng such statement	, inventive step or industrial appl	icability;
•	Statement			
	Novelty (N)	Claims	1-29	YES
		Claims		NO
	Inventive step (IS)	Claims	1-29	YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-29	YES
		Claims		NO

2. Citations and explanations

This report makes reference to the following documents:

D1: WO 01/15760 A (SCHUCKMANN ALFRED VON), 8 March

2001

D2: EP-A-0 652 022 (TEIJIN LTD), 10 May 1995

#### Claims 1-21:

2. Document D1 is considered to constitute the prior art closest to the subject matter of claim 1 and discloses (the references in parentheses are to that document):

a manually actuated inhalator for powdered substances having a metering chamber (figure 5a), the base of the metering chamber being formed by an air-permeable membrane (47, figure 5a).

2.1 The subject matter of claim 1 therefore differs from the known manually actuated inhalator for powdered substances described in D1 in that the air flow volume resulting from the movement of the piston amounts to more than hundred times but less than six



hundred times the volume of the metering chamber.

- 2.2 The subject matter of claim 1 is therefore novel (PCT Article 33(2)).
- 2.3 The present invention can therefore be considered to address the problem of designing the metering chamber in such a way that stronger stresses upon the air-permeable membrane can be avoided.
- 2.4 The solution to this problem, as proposed in claim 1 of the present application, involves an inventive step (PCT Article 33(3)) for the following reasons:
  - D1 does not indicate the exact design of the metering chamber, and D2 works according to a different principle, so that a person skilled in the art would not be guided to the solution as per claim 1.
- 2.5 Claims 2-21 are dependent on claim 1 and therefore also meet the PCT novelty and inventive step requirements.

### Claims 22-29:

- 3. Document D1 is considered to constitute the prior art closest to the subject matter of claim 22 and discloses (the references in parentheses are to that document):
  - a manually actuated inhalator for powdered substances having a metering chamber (figure 5a), the base of the metering chamber being formed by an air-permeable membrane (47, figure 5a).

- 3.1 The subject matter of claim 22 therefore differs from the known manually actuated inhalator for powdered substances described in D1 in that the metering chamber is open towards the substance reservoir in the initial position of the shaft.
- 2.2 The subject matter of claim 22 is therefore novel (PCT Article 33(2)).
- 2.3 The present invention can therefore be considered to address the problem of designing the metering chamber in such a way that metering and administration of powder doses are improved (see page 7, lines 5-15).
- 2.4 The solution to this problem, as proposed in claim 1 of the present application, involves an inventive step (PCT Article 33(3)) for the following reasons:
  - In D1, the filling path that leads to the metering chamber is closed towards the substance reservoir (SV) in the initial position of the shaft (15), and therefore the powdered substance cannot enter the metering chamber in this initial position. D2 is technically further removed. A person skilled in the art would therefore not arrive at the subject matter of claim 22, in the light of the problem and of documents D1 and D2.
- 2.5 Claims 23-29 are dependent on claim 1 and therefore also meet the PCT novelty and inventive step requirements.